Enforcement Dynamics in Federal Air Pollution Policy

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During his tenure as President, George W. Bush has pushed a domestic policy agenda that strongly advocates reducing the burdens on business, allegedly caused by regulations that have been deemed too punitive and too expensive by the Administration and its allies. This policy shift has taken place within most agencies responsible for administering social and economic regulation, but environmental regulation has been the most salient and visible example of the Administration’s attempt to roll back enforcement activities. In particular, administration officials have spent much time trying to rewrite the New Source Review rules under the Clean Air Act, specifically to ensure that power plants and other energy concerns would not have to spend potentially billions on anti-pollution control when they upgrade their facilities. With strong efforts like these, to make regulation more business-friendly, it is natural to expect that enforcement activities in the EPA would decline during the Bush Administration. However, this conclusion may be premature, given previous research on this subject.

Our primary interest in this paper is to determine whether the Bush Administration has been successful, through the use of subtle means of presidential power, in rolling back air pollution enforcement levels at the EPA. There has been abundant anecdotal evidence from interests groups and the media, regarding the Administration’s desire to weaken existing rules and make it more difficult to pass new ones (Barcott 2004; Drew and Oppel Jr. 2004). However, these accounts have not examined the effects that such efforts have had on administrative outputs from within the bureaucracy. We believe that this question, within the context of the Bush Administration, adds to our understanding of the broader question of how the executive branch controls bureaucratic agencies. Previous research has demonstrated that Republican Administrations, primarily the Reagan Administration,
have used executive power forcefully in order to narrow the scope of social regulation, but with somewhat limited success (Ringquist 1995; Wood and Waterman 1994). Some observers have suggested that the Bush Administration has learned from the over-reaching of the Reagan years and has consequently, employed a more subtle approach to manipulating bureaucratic outputs (Barcott 2004). In this paper, we will begin exploring the effect that the Bush Administration has had on environmental regulation, particularly the much-discussed notion that the Bush Administration has used creative, new administrative means to influence policy without garnering significant attention.

**Presidential Power and the Bureaucracy**

In this paper, we are primarily concerned with the question of how presidents can use their power to influence the federal bureaucracy. Much recent work on the presidency focuses on how presidents can accomplish policy goals unilaterally, typically through administrative means, such as appointments (Moe 1985; Nathan 1983; Whitford 2005; Wood and Waterman 1994), executive orders (Cooper 1986, 1997; Krause and Cohen 1997; Mayer 1999), agency reorganization (Moe 1987; Wood and Waterman 1994) and with careful review of new regulatory rules (Kerwin 2003; McGarity 1991). Importantly, Moe and Howell have also argued that language in the Constitution, stating that the president shall “take care that the laws be faithfully executed,” builds ambiguities into the formal structure of power that the president can push to further enhance his own power (1999). In other words, the president may take bold, even radical, steps in policy making that he may claim are necessary in order to make sure that the laws are faithfully executed.
Many observers of the Bush Administration have noted that under President Bush, many of these administrative tools have been employed aggressively to bring bureaucratic agencies in line with White House policy objectives. Like Reagan and, to a lesser extent, George H.W. Bush, the current President Bush has appointed industry insiders to many key positions in agencies responsible for the implementation of social regulation. However, the administration has utilized other unilateral tactics that go beyond the typical methods used by presidents to influence the bureaucracy, tactics that some observers claim are barely visible to the public and are thus part of a larger strategy to go “under the radar” (Gerber and Cohen 2003). For example, the Administration has often altered the wording or findings of scientific reports in order to downplay the need for stronger regulations (Andrews 2006; Rosenbaum 2006; Vig 2006). Additionally, in some cases, existing lawsuits or investigations were not followed through vigorously, due to either a rule change or a belief in regulatory relief for industry, a process known as “tanking a lawsuit” by some scholars (Gerber and Cohen 2003). Finally, in clean air regulation, agency employees have also claimed that they were barred from doing analysis on policy proposals that conflicted with the Administration’s agenda (Lee 2003). In this paper, we argue that there are important reasons why the Bush Administration would want to use an administrative strategy to affect environmental policy and that, through the use of such tactics, the Administration has been able to shape policy, to a degree.

Why An Administrative Strategy?

There are three main reasons why a president might choose to enact environmental policy via an administrative strategy, rather than by working with Congress or appealing to
the public to pass new legislation. First, because environmental regulation is a salient issue (Gormley 1986; Ringquist, Worsham and Eisner 2003), policy is fiercely fought over by environmental groups who want strong regulation, industry groups who want to minimize the costs of such regulation and their representative members in Congress. Consequently, EPA officials frequently feel tugged and stretched by a multitude of governmental and non-governmental actors at both the federal and state levels (Waterman, Rouse and Wright 1998). This competition has intensified recently as the environmental policy subsystem under the Clinton and Bush Administrations has become characterized, to a large extent, by partisan warfare where suspicion and mistrust are more common than cooperation and compromise (Kraft 2006). The feelings of mistrust are exacerbated by the complexities and uncertainties of environmental policy outcomes which make it difficult for each side to trust the other on their policy promises.

Second, presidents often appeal to the public to gather support for their policies (Canes-Wrone 2001; Kernell 1997; Neustadt 1960), but when the primary objectives of a president, such as President Bush, are to reform environmental regulation and perhaps limit the intensity and scope of enforcement, appealing widely to the public and to Congress can be very risky. Although environmental policy seldom ranks at the top of issues about which Americans are most concerned, polls typically show that a majority of Americans favor strong environmental protection (Dunlap 1989). Thus, in the past, when Republicans have appealed to the public to reduce the costs and burdens of regulation, their messages have been successfully counter-attacked by environmental groups who claim that Republican plans are veiled attacks on clean air, water and land regulations. For example, Reagan’s first appointee to head EPA, Anne Burford, was so openly hostile to
environmental interests that she earned the ire of Congress and was forced to resign by mid-1983. Additionally, when the Republicans swept into Congress in 1994, they made sweeping statements about rolling back the scope of regulation. President Clinton retaliated with a strong pro-environmental message and the regulatory reforms of the GOP majority became bogged down in Congress. Thus, any attempt to weaken environmental enforcement openly will, more often than not, fight a losing battle in the court of public opinion. The pursuit of a subtle, administrative strategy lessens the risks of potentially alienating the public.

Finally, the inherent complexity of environmental policy and the uncertainty surrounding policy outcomes enable the president to go under the radar by proposing policies that may sound good to the average voter, but also may in fact be bad for the environment. Such uncertainty arises largely from the varying assumptions employed in environmental impact studies (Andrews 2006), as well as the use of scientific data that “may be fragmentary, inconclusive, or at least contentious” (Rosenbaum 2006). With such uncertainty abounding as a result of these policy studies, it is easier to promote the alleged virtues of a policy that many other observers may consider to be dangerous. Exploiting such policy ambiguities has been a hallmark of the current Bush Administration. To reduce air pollution, Bush sent to Congress his “ClearSkies” legislation, a proposal that Bush claimed would lead to a 70 percent reduction of sulfur dioxide, nitrogen oxides and mercury emissions from power plants between 2008 and 2018 (Rosenbaum 2006), even though it was a weaker proposal than one initially put forth by the EPA (Seelye 2002). Moreover, although the “Data Quality Act” was passed as a small provision in a bill before Bush came to office, the Administration has still exploited this law in an attempt to slow
dramatically the growth of new regulatory rules. In theory, the law ensures that sound science is used to construct new regulations, but because industry groups have the right under the law to challenge the science behind new regulations, critics claim that the law is merely a tool for curtailing new rules (Weiss 2004).

**Potential for Bureaucratic Resistance**

Although it may make sense for conservative presidents to use administrative means to roll back environmental regulation enforcement, scholars have also emphasized the capacity of some agencies to resist political control and take policy in their own direction. In environmental regulation, the ability of the agency to resist a political principal, such as the president, depends largely on the ability of career staff to develop thoroughly their own expertise and knowledge that they can use independently of political principals or political agency appointees (Rourke 1984). This is more likely to occur in an agency in which career staff are committed to the organization’s mission (Kaufman 1960; Meier 1993; Rourke 1984; Wilson 1989). When the EPA was created, it was originally designed to represent the interests of environmentalists (Marcus 1980; Rosenbaum 1989) and despite some attempts to reduce the scope of regulation, the agency’s mission has not genuinely changed. Rourke also maintains that agencies with large constituencies are more likely to develop power independent of their political principals (1984). Similarly, Carpenter argues that agencies develop autonomy because they have entrepreneurial leaders who are able to cultivate broad coalitions of support (2001). In the case of environmental regulation, because the benefits of clean air, water and land are spread across virtually everyone, the agency’s constituency is virtually everyone. Because the
EPA has expertise, a core agency mission and a large constituency, we would expect it to have a great deal of autonomy, yet the high salience of environmental policy betrays the agency as numerous political actors vie for influence over agency policy (Waterman, Rouse and Wright 1998).

This body of research suggests that high-profile agencies responsible for implementing social regulation, such as the EPA, may be responsive to political control from conservative administrations, yet may also show the capacity to resist. Many federal bureaucrats were hostile to the domestic policy initiatives of the Nixon Administration (Aberbach and Rockman 1976), as well as the Reagan Administration (Maranto 1993). Evidence of such clashing was present in Reagan’s EPA, as enforcement activity actually increased right after his inauguration as well as in response to the resignation of his first EPA Administrator, Anne Burford (Wood and Waterman 1994). Additionally, in his thoughtful analysis of the EPA’s Office of Water Quality, Ringquist finds that efforts at political control from Congress and the President were successful, but that the impacts were short-term and that EPA bureaucrats “used more subtle strategies and ‘hidden actions’ to maintain a strong enforcement presence, keeping civil fines high…” (1995: 359).

The Use of Administrative Power in the Bush Administration

Appointments

One of the president’s strongest sources of power is his ability to appoint his own people to key positions in bureaucratic agencies throughout the government. By appointing people with similar ideological leanings, the president ensures, with fewer monitoring costs, that policy will be implemented according to his preferences. In
environmental regulation, President Reagan was initially successful in rolling back regulatory enforcement activities with his appointment of Anne Burford to run the EPA (Mintz 1995; Whitford 2005; Wood and Waterman 1994), yet Burford’s hostility to environmental interests aroused the ire of Congress and eventually lead to her resignation in March 1983 after questions arose about her potential role in a toxic waste dumping scandal (Wood 1988). Burford’s tenure at EPA is a symbol of Reagan’s early ambition to roll back dramatically the scope of environmental regulation, an ambition that eventually met stiff resistance from Congress and environmental groups. Reagan’s subsequent EPA Administrators, William Ruckleshaus and Lee Thomas, were more conciliatory and did not work actively to reduce enforcement activity (Wood and Waterman 1994). Given that Reagan’s environmental agenda was stopped by over-reaching, to a degree, it raises the question of whether other appointees might have been able to implement Reagan’s regulatory roll backs.

President George W. Bush came to office with the same desire to relax regulations that President Reagan had when he assumed the presidency in 1981. So, what, if any, lessons did Bush officials learn from the excessive ambition of the early Reagan era? Some observers in the media have suggested that the Bush Administration decided it made more sense to appoint less outspoken individuals to head important agencies while installing former lobbyists and industry officials to lower levels within the agencies (Barcott 2004). This way, significant regulatory policy change can take place through subtle, administrative means, rather than through highly visible tools, like new legislation from Congress. In their comprehensive study, Wood and Waterman find that the head of the Office of Defect Design at the National Highway and Traffic Safety Administration had
a significant impact on the number of engineering evaluations produced (1994: 61).
Additionally, the hazardous waste chief under Reagan, Rita Lavalle, became embroiled in a toxic dumping scandal, although Burford was allegedly involved as well (Wood and Waterman 1994).

Many of the administrative appointments made by Bush do fit this pattern. Bush’s first EPA Administrator, Christine Whitman, who was not at all outspoken, had a reputation as a moderate, was trusted by many environmental groups and was confirmed by the Senate, 99-0. However, appointments to key positions at lower levels were more controversial. The Deputy Administrator, Linda Fisher, had worked in the EPA for more than ten years, but she had also worked for the chemical company, Monsanto. Jeffrey Holmstead, who had represented electric utility groups at the lobbyist firm of Latham and Watkins, became Assistant Administrator for Air and Radiation, where he would steer the implementation of air pollution policy. Finally, Thomas Sansonetti was confirmed as Assistant Attorney General of the Environment and Natural Resources Division, yet he had also lobbied for private interests, most notably coal companies. Donald Schregardus, Bush’s first choice to head up the EPA Office of Enforcement and Compliance, had not been a lobbyist, but persistent criticism of his performance as Ohio EPA Administrator forced him to withdraw from consideration.¹

What sort of impact would this arrangement of appointments have on the inspection and enforcement activities of the EPA? Christine Whitman may have shared, to some extent, President Bush’s regulatory philosophy of bringing compliance through cooperation, rather than confrontation or punishment, but she was also a reliable enforcer

¹ In this analysis, we only examine the impacts of the appointments of Holmstead and Sansonetti. Including Fisher as well would have presented too many interventions in too short a time frame.
of the law, from the perspective of environmentalists. She began her tenure, enthusiastic about the chance to implement new regulations and we should expect that EPA clean air enforcements, if they were responsive to her appointment, would either remain stable or increase, but would probably not decrease. However, if the Administration’s preferences for enforcement are more closely aligned with a sub-EPA administrator, such as Jeffrey Holmstead, than with Administrator Whitman, EPA deputies can then have more independent influence over policy. If lower-level appointments, such as Holmstead and Sansonetti helped to decrease regulatory enforcement, this is a potential indicator of competition for authority over clean air policy from within the EPA. Indeed, the willingness of Holmstead and Sansonetti to stay on through 2004 after Whitman resigned in May 2003 may be an indicator that the Assistant Administrators were more pro-industry than Whitman and, as a result, their views were looked upon more favorably by the Administration. Thus, although previous research indicates that changes in enforcement activity are largely the product of administrative changes at the top of an agency, we hypothesize that enforcement may have decreased as a result of such appointments as Holmstead and Sansonetti rather than of Whitman herself.

In addition to the effects that appointments have, the resignations of key appointees can also have an important impact. If an agency is faced with the resignation of someone like Burford under Reagan, an appointee who harbored ideological leanings hostile to the agency mission, career staff may respond with a sudden surge in enforcement activity. Wood and Waterman document that this is exactly what happened when Burford resigned in 1983 (1994). In the case of the George W. Bush Administration, it is not as clear what effect Christine Whitman’s resignation should have. Most accounts in the media have
suggested that Whitman left because industry insiders in the Departments of Energy and Interior, as well as within her own EPA, succeeded in pressing for weaker enforcement than what she desired. Thus, because she was considered the strongest proponent of enforcement in the Administration, it is not clear that her resignation would lead to a surge in activity.

Finally, we also expect that the subsequent appointments of Michael Leavitt and Stephen Johnson to be EPA Administrator should have an impact on clean air enforcement activity. Leavitt, nominated by Bush in August 2003 and confirmed by the Senate in October 2003, was not outspokenly hostile the mission of the EPA, but he was a reliably conservative governor from Utah, who was a strong advocate of property rights. Thus, although we should probably not expect a dramatic decrease in enforcement activity as a result of the Leavitt appointment, we should expect a decrease nonetheless. Stephen Johnson, on the other hand, at the time of his confirmation in April 2005, had been a career EPA scientist for more than 20 years and his appointment surely should have signaled to the career staff that one of their own had been tapped to head the agency. As a result, we should witness an increase in enforcement activity subsequent to the Johnson appointment.

Rulemaking

The Bush Administration also made important changes to regulatory rules in 2003 and 2005. Rules are written by agencies under the authority of broader legislation passed by Congress and they have the force of the law to back them up. Rulemaking lacks some of the advantages possessed by other unilateral, administrative tactics, in that it often takes considerable time to pass new rules and there are more veto players in the rulemaking
process than in the process of reorganizing an agency or nominating agency appointees. The original rule, once it emerges from the authoring agency, must pass muster in the Office of Information and Regulatory Affairs and once that it is done, it must endure a “notice and comment” period through which affected interests can relay their concerns back to the agency, who, in turn, may or may not incorporate those concerns back into the rule. In a way, it is a mini legislative process, yet it has nowhere near the level of bargaining, coalition-building and visibility that is typical of passing laws through Congress. Thus, for an administration that wants to change the substance of regulations, proceeding with a process of rulemaking or rule-changing may be more effective and less costly than attempting to pass legislation through Congress.

Previous research illustrating direct effects of rule changes on administrative outputs is a bit scarce, but because rule changes often provide substantial alterations to existing regulatory policy, there is good reason to expect that agency outputs will respond with varying lag time. Regarding stationary sources under the Clean Air Act, the Bush Administration implemented two major rule changes during its tenure, the first one being the controversial policy of New Source Review. New Source Review (NSR) rules dictated that when a power plant or coal-fired plant passed a certain monetary threshold in spending to upgrade their facilities, they also had to upgrade their pollution abatement equipment. Late in the Clinton Administration, the EPA discovered that this clause of the Clean Air Act was not being enforced and the agency proceeded to file lawsuits against several companies that were in violation of NSR. Representatives from the power industry argued vehemently against enforcement of the NSR rules, claiming that plants had merely been
performing routine maintenance and that upgrading anti-pollution equipment would be prohibitively expensive.

Although the specific subject of NSR had not been discussed during the 2000 presidential campaign, Bush’s friendliness towards the energy industry signaled that there may be changes to either the NSR rules or to the status of the lawsuits against the power plants. In May 2001, Vice President Cheney’s Energy Task Force ordered a 90-day review of New Source Review, although the review actually extended well into 2002. Although the Justice Department announced in January 2002 that the Clinton-era lawsuits had merit and that it would proceed in prosecuting the lawsuits, environmentalists and some career staff at the EPA grew very skeptical of the Administration’s commitment to enforcing the NSR rules, causing some to leave the agency (Barcott 2004). Prior to the announcement of the final NSR rule changes, Sylvia Lowrance, the Deputy Administrator for Air and Radiation, under Holmstead, suggested to Holmstead that a reasonable threshold for the rules would be .75 percent, meaning that if a power plant was valued at $1 billion, then the owners could spend up to $7.5 million in upgrades without installing new antipollution equipment (Barcott 2004). When the final rules were announced in August 2003, they stipulated that coal-fired plants may perform maintenance worth up to 20 percent of the value of the plant before also upgrading anti-pollution equipment. In light of the rule change, the EPA announced in November that it would be dropping many of the existing lawsuits against coal-fired power plants that had originally been filed by the Clinton Administration. Given that many ongoing investigations were dropped, it is logical to
expect that consent decrees should have seen a decrease as well soon after. If there was no such drop, it may have been because the agency was resistant to the change.

Although the Bush Administration largely pursued an administrative strategy in environmental regulation, it did put before Congress in February 2002 new legislation for regulating air pollution, known as the “Clear Skies” bill. Clear Skies emphasized reductions in sulfur dioxide, nitrogen oxide and mercury, mostly through programs of capping and trading emissions, yet the goals of the bill were denounced as too weak by environmentalists from the outset and as too strong by some members of Congress from power plant-dominated Midwestern states. Subsequently, as often happens with proposed legislation, the bill was constantly fought over, but it never made it out of committee and essentially died before it ever gained any momentum. Because of this lack of success, the EPA issued in March 2005 the Clean Air Interstate Rule (CAIR), a new rule that featured many of the same provisions of the Clear Skies bill, except that it was a bit more limited. Whereas Clear Skies proposed comprehensive legislation, CAIR put a permanent cap on sulfur and nitrogen dioxide emissions in 28 states in the Eastern and Midwestern United States.

Although the Clear Skies bill, and thus CAIR, was weaker than what some EPA officials had originally proposed, there is good reason to believe that CAIR would have been welcomed warmly by career staff at the EPA. First, it was not denounced by environmentalists and second, EPA enforcement officials had been operating in a state of ambiguity during much of the Bush Administration, due to the limbo status of the NSR rules and the Clear Skies legislation. The implementation of CAIR represented a clearly

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2 It should be pointed out that one month later, a federal judge issued an injunction against the implementation of the new rules, as a result of lawsuits filed by nine state attorneys general. However, we stand by the point that the new rules and the dropped investigations should have provided a clear signal to EPA staff, regarding enforcement activity.
articulated, new policy to which enforcement advocates could lend their support. Thus, it
is reasonable to expect that CAIR represented a turnabout of sorts for the Bush
Administration and that it would actually lead to an increase in enforcement outputs.

**Data and Methods**

In order to test the effects of Bush appointments and presidential statements on
regulatory enforcement activity, we obtained from the Air Facility System (AFS) of EPA,
through a Freedom of Information Act Request, data on the enforcement and inspection
activities, on stationary sources under the Clean Air Act, of the head EPA office as well as
all regional offices. We are mindful of potential critiques that administrative outputs do
not translate directly into policy outcomes and therefore, we refrain from making definitive
claims about the alleged success or lack of success of the Bush Administration in bringing
cleaner air. Nonetheless, the categorization of activities into inspection and enforcement
has been used before, as it examines the tendency of the EPA to monitor firms’ activities as
well as to punish firms for not being in compliance (Wood 1988)\(^3\). For the current analysis,
our period of investigation begins in January 2001 and ends in December 2005, with the
data divided into monthly intervals.

If President Bush successfully employed the tools of his presidency to
manipulate bureaucratic outputs, then we should expect some decrease in enforcement and
inspection activities from 2001 through 2005. However, this predicted decrease is likely to

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\(^3\) Inspection activities are further categorized into full compliance evaluations (FCEs) and inspections and
partial compliance evaluations (PCEs) and inspections. FCEs include On-Site and Off-Site full compliance
evaluations and EPA Level 2 Inspections. PCEs and inspections include EPA Complaint Evaluation On-
Site PCEs, EPA Process Off-Site PCEs, EPA On-Site PCE Observation, EPA Permit On-Site PCE, EPA
PCE On-Site, EPA PCE Off-Site. Enforcement activities are comprised of notices of violation, consent
decrees and administrative orders. Administrative orders are further comprised of EPA Orders, Notices of
Non-Compliance and Penalty Orders for Non-Compliance.
manifest itself in some categories more than others. For example, notices of violation should see a decrease in activity as these involve notifying firms when they are in violation of the Clean Air Act. Because the Bush Administration has expressed the desire to employ cooperative policies with industry, thereby getting them to comply voluntarily, emphasis on punitive measures has been reduced. Therefore, we expect to witness a decrease in notices of violation. Similarly, we expect to see an overall decrease in consent decrees, which are settlements between business and the EPA, designed to reduce bad business behavior.

Looking at the enforcements and inspections series in Figure 1, we see that there is actually not much of a decreasing pattern over time. In fact, although it does fluctuate around, the enforcement series does not show a significant increase or decrease. On the other hand, the inspections series, contrary to expectations, does not remain constant, yet seems to increase substantially in 2003. The series also appears to become more volatile and heteroscedastic at this point, but the trend upward rather than downward is what provides the real surprise. Additionally, the series for notices of violation and for consent decrees, not pictured, also do not show any noticeable patterns. Thus far, it does not appear that President Bush’s pro-energy production agenda has produced noticeable declines in environmental regulation enforcement activity.

To examine the effect of presidential administrative actions on EPA outputs, we use an ARIMA model, employing lags of 1 month for each dependent variable. Because of potential heteroscedasticity in the series, particularly in the latter part of the inspections series, we use semi-robust standard errors. Our predictor variables are the aforementioned presidential appointments and rule changes, as well as the change in EPA’s budget for each
year in the period studied. For the budget, we include two variables—one for budget increases and one for budget decreases.

**Results**

In Table 1, we present the results of our model. Among the EPA Administrators, there was an effort to reduce enforcement actions. Both consent decrees and overall enforcement actions declined under both Whitman and Leavitt, indicating some success for the Bush Administration in weakening environmental regulations. This also indicates that Whitman did not have a separate environmental policy agenda that differed from the Bush Administration’s. Stephen Johnson’s appointment resulted in an increase in inspections, but had no other significant impact on enforcement activity. This provides some evidence for the idea that EPA bureaucrats would respond favorably to the appointment of a career scientist like Johnson, by pursuing inspections or enforcements more vigorously. Among the lower level appointments, the appointment of Jeffrey Holmstead to head the Office of Air and Radiation had no significant effect on either inspection or enforcement activity while the appointment of Thomas Sansonetti to the environmental crime unit of the Justice Department had no significant effect on the number of settlements (consent decrees).

For the rule changes, the high-profile changes to the NewSource Review rules did result in a decrease in enforcements. The Clean Air Interstate Rule, the administrative version of President Bush’s Clear Skies legislation, did not affect enforcements, but did result in a decrease in inspections, contrary to expectations. Finally, we see that for decreases in EPA budget, inspections actions actually increase significantly while enforcement actions significantly decrease. It is logical that fewer resources result in fewer
enforcement actions but the subsequent increase in inspections is a little more difficult to explain.

**Discussion**

Overall, and consistent with previous research, our results suggest that appointments and rule changes did have impacts on air pollution administrative outputs at the EPA. Lower level appointments had no virtually no impact whatsoever, indicating that an under-the-radar strategy through lower level appointments did not have the desired effect on enforcement. However, the Administration was successful in engineering a decline in the intensity of enforcement through its selection of EPA Administrators. Although Christine Whitman was known to be a moderate Republican, she shared the Bush Administration philosophy of reducing enforcement in favor of cooperating with business. On the other hand, Whitman’s resignation may have been an indicator that Whitman felt the philosophy went too far under Bush. Michael Leavitt had a more conservative reputation than Whitman and the subsequent decrease in enforcement actions during his tenure comes as less of a surprise. Finally, we see that under Stephen Johnson, a career EPA scientist, there was a shift in regulatory policy as inspections increased and enforcement actions did not change significantly. This is a potential indicator that EPA career bureaucrats responded favorably to Johnson’s appointment.

With the rule changes, we again see the potential effects of political control. The changes to the New Source Review rule and subsequent dropping of several investigations and lawsuits, which came largely from the White House and the Bush Administration EPA appointees, signaled that enforcement was not a major priority. Media accounts at the time
did suggest that numerous EPA career officials were disgusted with the new rules, but the still succeeded in reducing enforcement through the rule changes. Additionally, the evidence does show that after passage of the Clean Air Interstate Rule, there were fewer inspections. Overall, the evidence indicates that there was some responsiveness to the rules to make regulations weaker.

The popular accounts of this presidency depict the administration as being intimately involved in the choices of agency appointees, the substance of agency reports and the details of new rule proposals. Given such involvement, we would expect that the White House would be able to alter enforcement patterns at the EPA as it saw fit. On the other hand, previous research has also indicated resistance from within the EPA at such attempts to roll back enforcement. In this study, we find that the Bush Administration has had some success in altering bureaucratic outputs, through appointments as well as rule changes.
References


Table 1: Effects of Appointments and Presidential Statements on EPA Enforcement and Inspection Activities

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<td>48.43*</td>
<td>-34.80</td>
</tr>
<tr>
<td></td>
<td>(125.83)</td>
<td>(28.89)</td>
<td>(28.52)</td>
<td>(32.98)</td>
</tr>
<tr>
<td>Constant</td>
<td>74.28</td>
<td>56.02***</td>
<td>26.54**</td>
<td>24.89**</td>
</tr>
<tr>
<td></td>
<td>(94.00)</td>
<td>(10.09)</td>
<td>(11.93)</td>
<td>(12.10)</td>
</tr>
<tr>
<td>AR(3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.33**</td>
<td>.39**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.15)</td>
<td>(.12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HET Squared Change in Budget</td>
<td>27.21***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(7.76)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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*** p<.01, **p<.05, *p<.10

--Coefficients are Unstandardized Estimates with Semi-Robust Standard Errors in Parentheses.

--All dependent variables are lagged at one month.
Figure 1: Enforcement and Inspections Series, January 2001-December 2005

2D Graph 2

Counts

Inspections

Enforcements

Date